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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,869	04/12/2001	Saeed Fereshtehkhou	6664MD	6629

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THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER	
RUDDOCK, ULA CORINNA	
ART UNIT	PAPER NUMBER
1771	6

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

· FILE

Office Action Summary	Application N .	Applicant(s)	
	09/833,869	FERESHTEHKHOU ET AL.	
	Examiner	Art Unit	
	Ula C Ruddock	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *30 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-29 and 31-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-29 and 31-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The Examiner has carefully considered Applicant's amendments and accompanying response filed January 30, 2003. The rejections in view of Haynes et al. (US 5,962,112) have been overcome.

Terminal Disclaimer

2. The terminal disclaimer filed on January 30, 2003, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application Numbers 09/082349 and 09/410,592 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-29 and 31-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-62 of copending Application No. 09/881,473. Although the conflicting claims are not identical, they are not patentably distinct from each other because Applicant's claims are drawn to a cleaning for

removing dust from a surface, whereas the claims of 09/881,473 are drawn to a macroscopically three-dimensional cleaning sheet. As a result, the claims are obvious variants of one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1 and 39 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shizuno et al. (US 5,525,397). Shizuno et al. disclose a cleaning sheet comprising a network sheet and a nonwoven fiber aggregate formed by the entanglement of fibers of a fiber web. The fibers of the nonwoven fiber aggregate are further

entangled with the network sheet (abstract) by water needling, i.e. hydroentangling (col 1, ln 64). The cleaning sheet is used for the purposes of collecting various kinds of dust (col 1, ln 12-14). The cleaning sheet can comprise a network sheet and two nonwoven fiber aggregates. The nonwoven fiber aggregate which is formed by the entanglement of fibers of a fiber web is disposed on opposite sides of the network sheet. The fibers of the nonwoven fiber aggregates are further entangled with the network sheet (col 3, ln 6-22). The material of the network sheet and the fiber aggregate may be selected from polyester, polyamides, and polyolefins (col 3, ln 39-47 and col 4, ln 3-10). The nonwoven fiber aggregate can be combined with a surface-active agent or a lubricant which can improve the surface physical properties of the fiber aggregate and can adsorb dust, or can be combined with a lubricant which imparts gloss to the surface to be cleaned (col 4, ln 26-31). The cleaning sheet is attached to a cleaning tool such as a mop handle (col 4, ln 48-51). Furthermore, it should be noted that the Examiner is equating Figures 1 and 2 of Shizuno et al. to the peaks and valleys of the present invention. As a result, Shizuno et al. do disclose a macroscopically three-dimensional textured cleaning sheet.

Although Shizuno et al. do not explicitly teach the claimed properties, i.e. Average Peak to Peak Distance and Surface Topography Index, it is reasonable to presume that these properties are inherent to Shizuno's article. Support for said presumption is found in the use of like materials, i.e. hydroentangled cleaning sheets made of polyester or polyolefin fibers. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald,* 205 USPQ 495. Without a showing that evidences a difference between the prior art and the present invention, anticipation is proper. In

addition the presently claimed properties of Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential would obviously have been present once the Shizuno et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

8. Claims 2-19, 23, 39, and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397), as set forth above, in view of Henry (US 4,064,061) or Thrasher (US 5,342,436). Shizuno et al. disclose the claimed invention but fail to teach that the sheet is treated with an additive comprises a mineral oil or a wax at an add-on level of at least about 0.01-25% by weight at a ratio of oil to wax of from about 3:7 to about 99:1. Henry teaches a cleaning cloth composition that includes mineral oil and paraffin wax (col 1, ln 50 to col 2, ln 1-2) and Thrasher teaches a composition comprises paraffin wax dispersed in mineral oil (abstract). Thrasher's composition also comprises fragrance components which the Examiner is equating to the perfume of the present invention. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used either Henry's or Thrasher's composition on Shizuno's cleaning sheet motivated by the desire to obtain a fibrous structure that leaves a scented protective residue on the surface to be cleaned.

It also would have been obvious to one having ordinary skill in the art to have the add-on amount of the additive and the ratio of oil to wax be within the claimed range, since it has been that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have

been motivated to optimize the add-on amount and the ratio of oil to wax in order to create a fibrous structure that can leave either a thin or thick protective residue.

9. Claims 20-22 and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397), Henry (US 4,064,061) or Thrasher (US 5,342,436) as applied to claims 2-19, 23, 39, and 46-48 above, and further in view of Gilmore et al. (US 5,369,858). Shizuno et al, Henry, and Thrasher disclose the claimed invention except for the teaching that the cleaning sheet further comprises a scrim material hydroentangled with the fibrous layers and the scrim material is made of a polypropylene. Gilmore et al. disclose a nonwoven fabric comprising at least one layer of a net (i.e. a scrim) of polymer filaments and at least one web of melt blown microfibers bonded together by hydroentangling (abstract). The polymeric nets can be prepared from polypropylene fibers (col 7, ln 7-8). It would have been obvious to one having ordinary skill in the art to have used Gilmore's scrim in the cleaning sheet of Shizuno et al., Henry, and Thrasher, motivated by the desire to obtain a cleaning sheet with increased tensile strength.

Furthermore, given that Shizuno et al., Henry, Thrasher, and Gilmore et al. meet each and every chemical and structural requirement set forth in the claims, then it must meet the property limitations of Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential recited that depend from said requirements. In other words, it is reasonable to presume that the invention of Shizuno et al. would inherently anticipate the physical properties of the present invention, since both inventions are drawn to hydroentangled cleaning sheets made of polyester or polyolefin fibers.

Since no other structural or chemical features are claimed which may distinguish the present invention from that of the Shizuno et al. invention, the presently claimed physical properties, that is, Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential are deemed to be inherent to the invention of Shizuno et al. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald,* 205 USPQ 495. Without a showing that evidences a difference between the prior art and the present invention, anticipation is proper. However, such evidence could support the proposition that the current claims are incomplete. In addition, the presently claimed property of Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential would obviously have been present once the Shizuno et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

10. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397) in view of Mackey (US 5,756,112). Shizuno et al. disclose the claimed invention except for the teaching that the additive is a microcrystalline wax.

Mackey discloses a nonwoven substrate (col 4, ln 20-36) with a microcrystalline wax (col 8, ln 1-19) impregnation. It would have been obvious to one having ordinary skill in the art to have used Mackey's crystalline wax on the cleaning sheet of Shizuno et al. motivated by the desire to increase the soil adhesion properties of Shizuno's cleaning sheet.

11. Claims 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397), Henry (US 4,064,061) or Thrasher (US 5,342,436), and Gilmore et al. (US 5,369,858), as applied to claims 20-22 and 40-45 above, and further in view of Mackey (US

5,756,112). Shizuno et al., Henry, Thrasher, and Gilmore et al., disclose the claimed invention except for the teaching that the additive is a microcrystalline wax.

Mackey discloses a nonwoven substrate (col 4, ln 20-36) with a microcrystalline wax (col 8, ln 1-19) impregnation. It would have been obvious to one having ordinary skill in the art to have used Mackey's crystalline wax on the cleaning sheet of Shizuno et al. motivated by the desire to increase the soil adhesion properties of the cleaning sheet of Shizuno et al., Henry, Thrasher, and Gilmore et al.

Allowable Subject Matter

11. Claims 24-29 and 31-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: no prior art was found to teach or suggest a cleaning sheet comprising one or more high basis weight regions having a basis weight of from about 30 to about 120 g/m^2 and one or more low basis weight regions, wherein the low basis weight region has a basis weight that is not more than about 80% of the basis weight of the high basis weight regions.

Response to Arguments

13. Applicant's arguments filed January 30, 2003 have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that neither the Haynes et al. (US 5,962,112), Henry (US 4,064,061), nor the Thrasher (US 5,342,436) reference disclose a macroscopically three-dimensional cleaning sheet having a first and a second outward surface

wherein at least one of said outward surfaces has a macroscopically three dimensional texture, said macroscopic dimensional texture being defined by peaks and valleys. This argument is not persuasive because the Haynes et al. reference has been withdrawn as a result of the present amendment. Furthermore, the Henry and Thrasher reference have been used for their teaching of a composition comprising a mineral oil or a wax. The Shizuno et al. reference has been used for its teaching of peaks and valleys, e.g. Figures 1 and 2. Furthermore, Applicant's claims are not specific to a particular surface pattern.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

UCR UCR
April 7, 2003

Ula Ruddock